



Commission on Accreditation of Allied Health Education Programs

Standards and Guidelines *for the Accreditation of Educational Programs in Polysomnographic Technology*

Standards initially adopted in 2004 revised in 2011

Adopted by the
American Academy of Neurology
Board of Registered Polysomnographic Technologists
Consortium of Academic Programs in Clinical Research
Committee on Accreditation for Polysomnographic Technologist Education
and
Commission on Accreditation of Allied Health Education Programs

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredits programs upon the recommendation of the Committee on Accreditation for Polysomnographic Technologist Education.

These accreditation **Standards and Guidelines** are the minimum standards of quality used in accrediting programs that prepare individuals to enter the Polysomnographic Technology profession. Standards are the minimum requirements to which an accredited program is held accountable. Guidelines are descriptions, examples, or recommendations that elaborate on the Standards. Guidelines are not required, but can assist with interpretation of the Standards.

Standards are printed in regular typeface in outline form. *Guidelines* are printed in italic typeface in narrative form.

Preamble

The Commission on Accreditation of Allied Health Education Programs (CAAHEP), Committee on Accreditation for Polysomnographic Technologist Education (CoA PSG), the American Academy of Neurology (AAN), the Board of Registered Polysomnographic Technologists (BRPT), and the Consortium of Academic Programs in Clinical Research cooperate to establish, maintain and promote appropriate standards of quality for educational programs in Polysomnographic Technology and to provide recognition for educational programs that meet or exceed the minimum standards outlined in these accreditation **Standards and Guidelines**. Lists of accredited programs are published for the information of students, employers, educational institutions and agencies, and the public.

These **Standards and Guidelines** are to be used for the development, evaluation, and self-analysis of Polysomnographic Technology programs. On-site review teams assist in the evaluation of a program's relative compliance with the accreditation Standards.

Description of the Profession:

Polysomnographic technologists use sleep technology as part of a team, under the general supervision of a licensed physician, by applying a unique body of knowledge and methodological skills involving the education, evaluation, treatment and follow-up of sleep disorders in patients of all ages. The polysomnographic technologist performs polysomnography and tests such as the Multiple Sleep latency Test, Maintenance of Wakefulness Test, Actigraphy and others used by a physician to diagnose and treat sleep disorders. These tests involve recording, monitoring, and analyzing EEG (electroencephalography), EOG (electrooculography), EMG (electromyography), ECG (electrocardiography), and multiple breathing variables including capnometry and oximetry during sleep and wakefulness. Testing procedures may involve application and adjustment of therapeutic modalities such as supplemental oxygen or positive airway pressure and include application of techniques, equipment, and procedures that are safe, aseptic, preventive, and restorative. Interpretive knowledge is required to recognize and respond to respiratory, cardiac or behavioral events that may occur during testing procedures. Technologists provide supportive services related to the ongoing treatment of sleep related problems. The professional realm of this support includes patient instruction on the use of devices for the treatment of breathing problems during sleep and helping individuals develop sleeping habits that promote good sleep hygiene.

I. Sponsorship

A. Sponsoring Institution

A sponsoring institution must be one of the following:

1. A post-secondary academic institution accredited by an institutional accrediting agency that is recognized by the U.S. Department of Education, and must be authorized under applicable law or other acceptable authority to provide a post-secondary program, which awards a minimum of a certificate/diploma at the completion of the program.
2. A full-service sleep center or branch of the United States Armed Forces that has appropriate accreditation such as that provided by the American Academy of Sleep Medicine (AASM).

It is recommended that students earn an associate degree or higher either in conjunction with or prior to completion of the program.

3. A foreign post-secondary academic institution acceptable to CAAHEP that is authorized under applicable law or other acceptable authority to provide a post-secondary program, which awards a minimum of a certificate/diploma upon completion of the program.

B. Consortium Sponsor

1. A consortium sponsor is an entity consisting of two or more members that exists for the purpose of operating an educational program. In such instances, at least one of the members of the consortium must meet the requirements of a sponsoring institution as described in I.A.
2. The responsibilities of each member of the consortium must be clearly documented as a formal affiliation agreement or memorandum of understanding, which includes governance and lines of authority.

A consortium is an entity separate from its members. The consortium, not its members, is the sponsor of the educational program. The consortium has its own governing body comprised of representatives from each of the members. The lines of authority from that

governing body throughout the educational program should be illustrated by an organizational chart. With a consortium sponsor, when interpreting these Standards, substitute “the consortium” for references to “the sponsor”.

C. Responsibilities of Sponsor

The Sponsor must assure that the provisions of these **Standards and Guidelines** are met.

II. Program Goals

A. Program Goals and Outcomes

There must be a written statement of the program’s goals and learning domains consistent with and responsive to the demonstrated needs and expectations of the various communities of interest served by the educational program. The communities of interest that are served by the program must include, but are not limited to, students, graduates, faculty, sponsor administration, employers, physicians, the public.

Program-specific statements of goals and learning domains provide the basis for program planning, implementation and evaluation. Such goals and learning domains must be compatible with the mission of the sponsoring institution(s), the expectations of the communities of interest, and nationally accepted standards of roles and functions. Goals and learning domains are based upon the substantiated needs of health care providers and employers, and the educational needs of the students served by the educational program.

Nationally accepted roles and functions in polysomnographic technology are reflected in the roles fulfilled by polysomnographic technologists in the workplace (the Board of Registered Polysomnographic Technologists (BRPT) Job Analysis) and the material covered in the appropriate national credentialing examination(s) (BRPT Examination Matrices), and the most recent version of the American Association of Sleep Technologist’s standard curriculum.

B. Appropriateness of Goals and Learning Domains

The program must regularly assess its goals and learning domains. Program personnel must identify and respond to changes in the needs and/or expectations of its communities of interest.

An advisory committee, which is representative of at least each of the communities of interest named in these Standards, must be designated and charged with the responsibility of meeting at least annually, to assist program and sponsor personnel in formulating and periodically revising appropriate goals and learning domains, monitoring needs and expectations, and ensuring program responsiveness to change.

The public member of the Advisory Committee should be a person who has valuable input to the program. The public member should not be employed by the sponsor or a clinical affiliate, should not be related to any key personnel of the Program, and should not qualify as any other named community of interest representative.

C. Minimum Expectations

The program must have the following goal defining minimum expectations: “To prepare competent entry-level polysomnographic technologists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains”.

Programs adopting educational goals beyond entry-level competence must clearly delineate this intent and provide evidence that all students have achieved the basic competencies prior to entry into the field.

Programs are encouraged to consider preparing advanced level or specialized practitioners.

III. Resources

A. Type and Amount

Program resources must be sufficient to ensure the achievement of the program's goals and outcomes. Resources must include, but are not limited to: faculty; clerical and support staff; curriculum; finances; offices; classroom; laboratory and ancillary student facilities; clinical affiliates; equipment; supplies; computer resources; instructional reference materials, and faculty/staff continuing education.

Clinical affiliates should conform to professional standards of practice, standards established by the American Academy of Sleep Medicine and by other health care accrediting entities, where applicable. Clinical affiliates should insure that students have appropriate access to and interaction with other related health care personnel and agencies.

Learning resources should be available to students outside of regular classroom hours, e.g., evenings and weekends. This should conform to the operational plans and standards of the participating sponsor. Instructional plans should promote student utilization of these resources.

B. Personnel

The sponsor must appoint sufficient faculty and staff with the necessary qualifications to perform the functions identified in documented job descriptions and to achieve the program's stated goals and outcomes.

1. Program Director

a. Responsibilities

The Program Director must be responsible for the continuous review, planning, development, and general effectiveness of the program. The Program Director has primary responsibility for the organization and administration of the program as well as provision of input and participation in all aspects of the program.

The program director may delegate responsibilities to other individual(s) qualified to perform those responsibilities.

The Program Director should pursue ongoing formal training designed to maintain and upgrade his/her professional, instructional and administrative capabilities.

b. Qualifications

The Program Director must possess at least an associate degree, be a Registered Polysomnographic Technologist (RPSGT) and have a minimum of two years clinical experience as a practicing polysomnographic technologist.

2. Medical Director

a. Responsibilities

The Medical Director of the program must ensure that the medical components of the curriculum, both didactic and supervised clinical practice, meet current standards of medical practice.

The Medical Director should ensure physician instructional involvement in the training of polysomnographic technologists and promote the cooperation and support of practicing physicians.

b. Qualifications

The Medical Director must be a licensed physician board certified in sleep medicine.

3. Faculty and/or Clinical Instructional Staff

a. Responsibilities

In classrooms, laboratories, and all clinical facilities where a student is assigned, there must be (a) qualified individual(s) clearly designated as liaison(s) to the program to provide instruction, supervision, and timely assessments of the student's progress in meeting program requirements.

b. Qualifications

The faculty must be knowledgeable in course content and effective in teaching their assigned subjects, and capable through academic preparation, training and experience to teach the courses or topics to which they are assigned.

Each clinical affiliate must have an instructor/preceptor who holds a national credential in polysomnography to supervise and evaluate the students.

C. Curriculum

The curriculum must ensure the achievement of program goals and learning domains. Instruction must be an appropriate sequence of classroom, laboratory and clinical activities. Instruction must be based on clearly written course syllabi that include course description, course objectives, methods of evaluation, topic outline and competencies required for graduation.

A program-length goal for the core curriculum, excluding requisites, should be 12 months.

1. Curriculum Requisites

The program must establish curriculum requisites that are met prior to, or concurrent with, the core curriculum. As a minimum these requisites must include:

- a. Written and oral communication
- b. Computational mathematics
- c. Computer literacy
- d. Social or behavioral sciences
- e. Biological sciences
- f. Medical ethics and law
- g. Basic patient care, comfort and safety
- h. Emergency preparedness in a medical setting
- i. Infection control
- j. Medical terminology
- k. Basic Cardiac Life Support certification

These requisites may be fulfilled by documented college level coursework or demonstrated competency.

Requisites for social or behavioral sciences and biological sciences should provide the basis for relevant learning outcomes in the core curriculum.

2. Core Curriculum

The core curriculum must include at least the following:

a. Core Knowledge

- 1) History of Sleep Medicine
- 2) Anatomy & physiology relevant to sleep and sleep disorders
 - a) Cardiovascular
 - b) Respiratory
 - c) Neurological
- 3) Normal and abnormal physiology and behavior of sleep
- 4) Classification, diagnosis and treatment of sleep disorders
- 5) Clinical evaluation of sleep and wakefulness
- 6) Application and management of positive airway pressure modalities for treatment of sleep related breathing disorders
- 7) Medication effects related to sleep and sleep disorders
- 8) Basic principles of biopotential recording and digital data acquisition
- 9) Basic principles of monitoring of breathing
- 10) Ethics and professionalism in sleep medicine

b. Polysomnographic Methodology

- 1) Preparation of the patient for polysomnography
- 2) Patient sleep history taking
- 3) Selection and preparation of appropriate equipment.
- 4) Recording montage design for polysomnography
- 5) Audio and video recording of movement and behavior during sleep
- 6) Patient monitoring and documentation.
- 7) Recognition and correction of recording artifact.
- 8) Infection control in the sleep laboratory
- 9) Employee and patient safety in the sleep laboratory
- 10) Medical, neurological and psychiatric emergencies in the sleep laboratory
- 11) Special patient needs
 - a) Pediatric
 - b) Geriatric
 - c) Bariatric
 - d) Mental or physical impairment

c. Procedural Protocols

- 1) Polysomnography
- 2) Multiple Sleep Latency Test
- 3) Maintenance of Wakefulness Test
- 4) Actigraphy
- 5) Positive airway pressure administration and titration
- 6) Administration of supplemental oxygen
- 7) Home sleep testing
- 8) Capnography
- 9) Pulse oximetry
- 10) Special considerations for pediatric patients

d. Data analysis

- 1) Recognition of normal and abnormal electroencephalographic patterns
- 2) Identification of sleep stages
- 3) Identification of arousals

- 4) Identification of respiratory events and patterns
- 5) Identification of movement events and patterns
- 6) Identification of electrocardiographic events
- 7) Summation and reporting of observational and analyzed results
- 8) Transfer and storage of recorded data

D. Resource Assessment

The program must, at least annually, assess the appropriateness and effectiveness of the resources described in these Standards. The results of resource assessment must be the basis for ongoing planning and appropriate change. An action plan must be developed when deficiencies are identified in the program resources. Implementation of the action plan must be documented and results measured by ongoing resource assessment.

Other dimensions of the program may merit evaluation as well, such as the admission criteria and process, the curriculum design, and the purpose and productivity of the Advisory Committee.

The format for resource assessment documents should be:

- Purpose statements;
- Measurement systems;
- Dates of measurement;
- Results;
- Analyses;
- Action plans;
- Follow-up

IV. Student and Graduate Evaluation/Assessment

A. Student Evaluation

1. Frequency and purpose

Evaluation of students must be conducted on a recurrent basis and with sufficient frequency to provide both the students and program faculty with valid and timely indications of the students' progress toward and achievement of the competencies and learning domains stated in the curriculum.

The evaluation system should provide each student and the program with a thorough analysis of the student's knowledge, performance-based strengths and areas needing improvement.

Valid means that the evaluation methods chosen in didactic, laboratory, and clinical activities are consistent with the competencies and objectives being tested, and are designed to measure stated objectives at the appropriate level of difficulty.

Students should have adequate time to correct identified deficiencies in knowledge and/or performance. Guidance should be available: to help students understand course content; to comply with program practices and policies; to provide counseling or referral for problems that may interfere with their progress through the program. Students should be eligible for all services offered by the educational institution.

2. Documentation

Records of student evaluations must be maintained in sufficient detail to document learning progress and achievements.

B. Outcomes

1. Outcomes Assessment

The program must periodically assess its effectiveness in achieving its stated goals and learning domains. The results of this evaluation must be reflected in the review and timely revision of the program.

Outcomes assessments include, but are not limited to: national technologist credentialing examination performance, programmatic retention/attrition, graduate satisfaction, employer satisfaction, job (positive) placement, and programmatic summative measures. The program must meet the outcomes thresholds established by the CoA PSG.

Programmatic summative measures may include comprehensive final examinations, terminal competency assessment, or student performance in a keystone course.

"Positive Placement" means that the graduate is employed full or part-time in a related field; and/or continuing his/her education; and/or serving in the military.

"National technologist credentialing examinations" are those accredited by the National Commission for Certifying Agencies (NCCA).

In an effort to keep programmatic attrition below the established CoAPSG threshold, the program should provide objective, success-related admissions standards, and/or prerequisites, and effective methods of assessing basic academic skills for all prospective students. Prospective students should be admitted to the program after having demonstrated at least a minimum acceptable level of academic skills performance.

2. Outcomes Reporting

The program must periodically submit to the CoAPSG the program goal(s), learning domains, evaluation systems (including type, cut score, and appropriateness), outcomes, its analysis of the outcomes and an appropriate action plan based on the analysis.

The program should maintain records of evaluations of the effectiveness of its action plan(s).

Programs not meeting the established thresholds must begin a dialogue with the CoA PSG to develop an appropriate plan of action to respond to the identified shortcomings.

V. Fair Practices

A. Publications and Disclosure

1. Announcements, catalogs, publications and advertising must accurately reflect the program offered.

2. At least the following must be made known to all applicants and students: the sponsor's institutional and programmatic accreditation status as well as the name, mailing address, web site address and phone number of the accrediting agencies; admissions policies and practices, including technical standards (when used); policies on advanced placement, transfer of credits, and credits for experiential learning; number of credits required for completion of the program; tuition/fees and other costs required to complete the program; policies and processes for withdrawal and for refunds of tuition/fees.

3. At least the following shall be made known to all students: academic calendar, student grievance procedure, criteria for successful completion of each segment of the curriculum and graduation, and policies and processes by which students may perform clinical work while enrolled in the program.
4. The sponsor must maintain, and make available to the public, current and consistent summary information about student/graduate achievement that includes the results of one or more of the outcomes assessments required in these Standards.

The sponsor should develop a suitable means of communicating to the communities of interest the achievement of students/graduates (e.g., through a website or electronic or printed documents).

B. Lawful and Non-discriminatory Practices

All activities associated with the program, including student and faculty recruitment, student admission, and faculty employment practices, must be non-discriminatory and in accord with federal and state statutes, rules, and regulations. There must be a faculty grievance procedure made known to all paid faculty.

In accordance with the Americans with Disabilities Act (ADA) and other governmental regulations, technical standards that define the essential functions of polysomnographic technology may be published and used in the lawful and non-discriminatory admission of students.

A procedure should be established for determining that a student's health will permit him or her to meet the documented technical standards of the program.

C. Safeguards

The health and safety of patients, students and faculty associated with the educational activities of the students must be adequately safeguarded.

All activities required in the program must be educational and students must not be substituted for staff.

The combined total program scheduled didactic/clinical educational activities of a student in the program should not exceed 40 hours per week.

D. Student Records

Satisfactory records must be maintained for student admission, advisement, counseling and evaluation. Grades and credits for courses must be recorded on the student transcript and permanently maintained by the sponsor in a safe and accessible location.

E. Substantive Change

The sponsor must report substantive change(s) as described in Appendix A to CAAHEP/CoAPSG in a timely manner. Additional substantive changes to be reported to the CoAPSG within the time limits prescribed include:

- The institution's legal status or form of control
- Change in award level.
- Addition of or conversion to distance education delivery

F. Agreements

There must be a formal affiliation agreement or memorandum of understanding between the sponsor and all other entities that participate in the education of the students describing the relationship, role and responsibilities between the sponsor and that entity.

APPENDIX A

Application, Maintenance and Administration of Accreditation

A. Program and Sponsor Responsibilities

1. Applying for Initial Accreditation

- a. The chief executive officer or an officially designated representative of the sponsor completes a "Request for Accreditation Services" form and returns it electronically or by mail to:

CoA PSG
1711 Frank Avenue
New Bern, NC 28560

The "Request for Accreditation Services" form can be obtained from the CAAHEP website at www.caahep.org/Content.aspx?ID=11.

Note: There is **no** CAAHEP fee when applying for accreditation services; however, individual committees on accreditation may have an application fee.

- b. The program undergoes a comprehensive review, which includes a written self-study report and an on-site review.

The self-study instructions and report form are available from the Committee on Accreditation for Polysomnographic Technologist Education (CoA-PSG). The on-site review will be scheduled in cooperation with the program and CoA-PSG once the self-study report has been completed, submitted, and accepted by the CoA-PSG.

2. Applying for Continuing Accreditation

- a. Upon written notice from the Committee on Accreditation for Polysomnographic Technologist Education (CoA-PSG), the chief executive officer or an officially designated representative of the sponsor completes a "Request for Accreditation Services" form, and returns it electronically or by mail to:

CoA PSG
1711 Frank Avenue
New Bern, NC 28560

The "Request for Accreditation Services" form can be obtained from the CAAHEP website at www.caahep.org/Content.aspx?ID=11.

- b. The program may undergo a comprehensive review in accordance with the policies and procedures of the Committee on Accreditation for Polysomnographic Technologist Education.

If it is determined that there were significant concerns with the conduct of the on-site review, the sponsor may request a second site visit with a different team.

After the on-site review team submits a report of its findings, the sponsor is provided the opportunity to comment in writing and to correct factual errors prior to the CoA-PSG forwarding a recommendation to CAAHEP.

3. Administrative Requirements for Maintaining Accreditation

- a. The program must inform the CoA-PSG and CAAHEP within a reasonable period of time (as defined by the committee on accreditation and CAAHEP policies) of changes in chief executive

officer, dean of health professions or equivalent position, and required program personnel (Refer to Standard III.B.).

- b. The sponsor must inform CAAHEP and the CoA-PSG of its intent to transfer program sponsorship. To begin the process for a Transfer of Sponsorship, the current sponsor must submit a letter (signed by the CEO or designated individual) to CAAHEP and the CoA-PSG that it is relinquishing its sponsorship of the program. Additionally, the new sponsor must submit a "Request for Transfer of Sponsorship Services" form. The CoA-PSG has the discretion of requesting a new self-study report with or without an on-site review. Applying for a transfer of sponsorship does not guarantee that the transfer of accreditation will be granted.
- c. The sponsor must promptly inform CAAHEP and the CoA-PSG of any adverse decision affecting its accreditation by recognized institutional accrediting agencies and/or state agencies (or their equivalent).
- d. Comprehensive reviews are scheduled by the CoA-PSG in accordance with its policies and procedures. The time between comprehensive reviews is determined by the CoA-PSG and based on the program's on-going compliance with the Standards, however, all programs must undergo a comprehensive review at least once every ten years.
- e. The program and the sponsor must pay CoA-PSG and CAAHEP fees within a reasonable period of time, as determined by the CoA-PSG and CAAHEP respectively.
- f. The sponsor must file all reports in a timely manner (self-study report, progress reports, probation reports, annual reports, etc.) in accordance with CoA-PSG policy.
- g. The sponsor must agree to a reasonable on-site review date that provides sufficient time for CAAHEP to act on a CoA-PSG accreditation recommendation prior to the "next comprehensive review" period, which was designated by CAAHEP at the time of its last accreditation action, or a reasonable date otherwise designated by the CoA-PSG.

Failure to meet any of the aforementioned administrative requirements may lead to administrative probation and ultimately to the withdrawal of accreditation. CAAHEP will immediately rescind administrative probation once all administrative deficiencies have been rectified.

4. Voluntary Withdrawal of a CAAHEP- Accredited Program

Notification of voluntary withdrawal of accreditation from CAAHEP must be made by the Chief Executive Officer or an officially designated representative of the sponsor by writing to CAAHEP indicating: the desired effective date of the voluntary withdrawal, and the location where all records will be kept for students who have completed the program.

5. Requesting Inactive Status of a CAAHEP- Accredited Program

Inactive status for any accredited program may be requested from CAAHEP at any time by the Chief Executive Officer or an officially designated representative of the sponsor writing to CAAHEP indicating the desired date to become inactive. No students can be enrolled or matriculated in the program at any time during the time period in which the program is on inactive status. The maximum period for inactive status is two years. The sponsor must continue to pay all required fees to the CoA-PSG and CAAHEP to maintain its accreditation status.

To reactivate the program the Chief Executive Officer or an officially designated representative of the sponsor must provide notice of its intent to do so in writing to both CAAHEP and the CoA-PSG. The sponsor will be notified by the CoA-PSG of additional requirements, if any, that must be met to restore active status.

If the sponsor has not notified CAAHEP of its intent to re-activate a program by the end of the two-year period, CAAHEP will consider this a "Voluntary Withdrawal of Accreditation."

B. CAAHEP and Committee on Accreditation Responsibilities – Accreditation Recommendation Process

1. After a program has had the opportunity to comment in writing and to correct factual errors on the on-site review report, the CoA-PSG forwards a status of public recognition recommendation to the CAAHEP Board of Directors. The recommendation may be for any of the following statuses: initial accreditation, continuing accreditation, transfer of sponsorship, probationary accreditation, withhold of accreditation, or withdrawal of accreditation.

The decision of the CAAHEP Board of Directors is provided in writing to the sponsor immediately following the CAAHEP meeting at which the program was reviewed and voted upon.

2. Before the CoA-PSG forwards a recommendation to CAAHEP that a program be placed on probationary accreditation, the sponsor must have the opportunity to request reconsideration of that recommendation or to request voluntary withdrawal of accreditation. The CoA-PSG's reconsideration of a recommendation for probationary accreditation must be based on conditions existing both when the committee arrived at its recommendation as well as on subsequent documented evidence of corrected deficiencies provided by the sponsor.

The CAAHEP Board of Directors' decision to confer probationary accreditation is not subject to appeal.

3. Before the CoA-PSG forwards a recommendation to CAAHEP that a program's accreditation be withdrawn or that accreditation be withheld, the sponsor must have the opportunity to request reconsideration of the recommendation, or to request voluntary withdrawal of accreditation or withdrawal of the accreditation application, whichever is applicable. The CoA-PSG's reconsideration of a recommendation of withdraw or withhold accreditation must be based on conditions existing both when the CoA-PSG arrived at its recommendation as well as on subsequent documented evidence of corrected deficiencies provided by the sponsor.

The CAAHEP Board of Directors' decision to withdraw or withhold accreditation may be appealed. A copy of the CAAHEP "Appeal of Adverse Accreditation Actions" is enclosed with the CAAHEP letter notifying the sponsor of either of these actions.

At the completion of due process, when accreditation is withheld or withdrawn, the sponsor's Chief Executive Officer is provided with a statement of each deficiency. Programs are eligible to re-apply for accreditation once the sponsor believes that the program is in compliance with the accreditation Standards.

Note: Any student who completes a program that was accredited by CAAHEP at any time during his/her matriculation is deemed by CAAHEP to be a graduate of a CAAHEP-accredited program.